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Reassessing the Modern Racism Scale in Modern Times

Debrah Zegelbone Migetz
University of Tennessee, Knoxville

To the Graduate Council:

I am submitting herewith a dissertation written by Debrah Zegelbone Migetz entitled "Reassessing the Modern Racism Scale in Modern Times." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Industrial and Organizational Psychology.

Lawrence R. James, Major Professor

We have read this dissertation and recommend its acceptance:

Dave Woehr, Harold Black, Tom Ladd

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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REASSESSING THE MODERN RACISM SCALE IN MODERN TIMES

A Dissertation Presented for the
Doctor of Philosophy Degree
The University of Tennessee, Knoxville

Debrah Zegelbone Migetz
May 2004

Dedication

This dissertation is dedicated to my best friend and husband, Paul, who has supported, encouraged, and cheered for me throughout my work on this project and all my life's projects. It is also dedicated to my wonderful children, Jaelyn Elizabeth and Grant Kelley, who have absolutely no idea what a dissertation or a Ph.D. is, but who have loved me and provided me with balance and meaning throughout the dissertation process. Finally, to my parents, Chuck Zegelbone and Lynn Nelson, great friends and wonderful role models, for always inspiring and encouraging me to reach higher to achieve my goals. I thank you and love you all more than I can ever express.

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Abstract

The valid assessment of racial attitudes remains a research goal. One of the most popular tools for this has been the Modern Racism Scale (MRS). However, current research suggests that the instrument may not be valid under ordinary behavioral conditions. Additionally, recent theory regarding the automatic and unconscious nature of racial attitudes suggests that new measurement methods may be necessary. The results of the present study do indicate that the validity of the MRS may be waning when used for assessment under normal behavioral conditions. It also indicates that implicit measurement of this attitude is superior to explicit. The Implicit Association Test and Conditional Reasoning, two new instruments designed to indirectly assess both the conscious and unconscious nature of racial attitudes, are also discussed.

Table of Contents

List of Tables

CHAPTER I
INTRODUCTION

It is well accepted that prejudice and discrimination exist in society and that individual thoughts and behaviors are responsible for the negative outcomes that often result. Probably the most pervasive and far-reaching form of prejudice and discrimination is racial. For example, racial minorities can be the subject of social bias in organizational settings (e.g., Alderfer & Thomas, 1988; Kraiger & Ford, 1985; Morrison & Von Glinow, 1990; Powel & Butterfied, 1997; Schuman, Steeh, & Bobo, 1985). They are frequently offered jobs, promotions, and training opportunities at lower rates than majorities, are regularly provided with substandard customer service, and are often discriminated against when applying for bank loans. Furthermore, in many parts of the United States, the different races tend to live in separate neighborhoods and communities, and their children attend segregated schools or only governmentally integrated schools (Feagin, Vera, & Batur, 2001; Hacker, 2003). This often leads to less than optimal educational opportunities for many minority children as their schools frequently receive less funding than majority populated schools (Feagin, Vera, & Batur, 2001; Hacker, 2003). In some states, black enrollment in large state-run universities falls below three percent (Hacker, 2003). One explanation for the above findings is that racial minorities continue to suffer the ill effects of negative racial attitudes in many important aspects of society.

For decades researchers have studied and measured racial attitudes, and have attempted to identify the factors responsible for racial prejudice and the discriminatory behavior that often follows. In addition to demonstrating the negative effects of racial prejudice, research shows that racial attitudes have been improving over time and that the belief in negative race-based stereotypes has been declining. For example, Schuman, Steeh, Bobo, and Kryson (1997) established, in a longitudinal series of racial attitude surveys, that attitudes toward and acceptance of racial minorities have steadily improved in the United States. According to their research, very few white Americans endorse negative statements about blacks, and most claim to be racially non-prejudiced. Further, Dovidio and Gaertner (1991) demonstrate that beliefs in negative racial stereotypes have significantly decreased since the 1930's.

Though such studies are encouraging, these same findings have prompted some researchers to propose alternative theories that explain why racial discrimination continues to exist in the face of improved reported attitudes (e.g., Devine, 1989, 1991; Gaertner & Dovidio, 1981, 1986; Greenwald & Banaji, 1995; McConahay, 1986). One of the most popular and well accepted is the theory of modern racism (McConahay, 1986).

This theory proposes that negative racial sentiment has not declined at the same rates as traditional measures and research would suggest. The contention is that only "old fashioned" prejudices have diminished, prejudices that are characterized by open bigotry and blatant disregard for racial minorities.

Alternatively, modern racism states that negative attitudes have actually gone "underground," having been replaced by subtle, rationalizable, and implicit forms of prejudice and bias. This has occurred as government and society in general have moved toward greater outward racial acceptance, thus motivating individuals to refrain from expressing negative racial attitudes. Therefore, they develop a set of racial beliefs that they deny are racist and can maintain a non-prejudiced view of themselves. The extent to which individuals possess this implicit set of beliefs is measured via the modern racism scale.

Since its publication, modern racism has been the prevailing theory used to explain the current state of racial attitudes and discrimination. Furthermore, the survey that accompanies this theory has been used overwhelmingly to identify racist and non-racist subjects in a variety race research. However, several significant issues exist that suggest a re-analysis of the validity and usefulness of the modern racism instrument as an assessment of current racial attitudes. The first issue concerns the time period in which it was developed and validated, specifically the late 1960's and the early 1970's. Given that the questionnaire was designed to reflect "modern" or implicit racial attitudes at that time, it cannot be assumed that the same beliefs hold true three to four decades later. More current research supports this conclusion (McConahay, 1986).

Additional concerns reflect modern racism theory's inability to incorporate more recent theory and research regarding racial stereotypes and attitudes. This body of research suggests that race-related stereotypes and attitudes may be

automatically activated when a target group member is encountered (Crosby, Bromley, & Sax, 1980; Devine, 1989, Fazio, Jackson, Dunton, & Williams, 1995; Gaertner & McLaughlin, 1983; Greenwald & Banaji, 1995; Wittenbrink, Judd, & Park, 1997). A model of racial prejudice developed and tested by Devine (1989) applies this new theory. Her model suggests that most people are knowledgeable of prevailing racial stereotypes and will automatically activate those stereotypes in response to a target. However, those low on racism are be able to assert personal control over racial stereotypes such that they are consciously repressed or inhibited from use (Devine, 1989). Racist individuals will not repress the racial stereotype and will respond in conjunction with it.

In the remainder of this paper a brief overview of both modern racism theory and the scale will be presented along with the results of reactivity and validation studies conducted by McConahay and others. In addition, a short discussion of Devine's (1989) model of the personal control of racist thoughts will be presented. Included in this section will be a discussion concerning the ways in which this new area of research may contraindicate the widespread use of the modern racism scale (MRS) as it is currently written. Finally, this paper will present the results of the current research designed to test the present validity of the MRS. This study is an attempt to demonstrate that the ability of the MRS to assess contemporary racial sentiment may be waning. Included in this analysis is a comparison of the validity of the MRS with that of two sub-scales of a social desirability scale, impression management and self-deceptive enhancement. The impression management and

self-deceptive enhancement measures will also be used demonstrate a limitation in Devine's (1989) test of her model, specifically that she is not able account for the impact of social desirability effects on her research.

Modern Racism

The MRS is designed "to measure a dimension of the cognitive component of racial attitudes" (McConahay, 1986, page 92). Participants are asked to respond with respect to their level of agreement with a set of beliefs regarding blacks in America. These modern racism beliefs are distinguished from a separate set of beliefs called "old fashioned" racism (defined above). The initial goal of the MRS was to develop an instrument that is less reactive than traditional old fashioned racism items, leading to greater validity and reliability, and a lower rate of refusal to answer racially motivated questions.

In specific, modern racists are defined by: (1) the belief that discrimination is a thing of the past because blacks now have the freedom to compete in the marketplace and to enjoy those things they can afford, (2) the belief that blacks are pushing too hard, too fast, and into places where they are not wanted, (3) that these tactics and demands are unfair, and (4) that recent gains for blacks are undeserved and that prestige granting institutions are giving blacks more attention and status then they deserve. Modern racists further believe that racial prejudice is bad and that the above beliefs do not constitute racism because they are empirical fact. Modern racists would claim to disagree with any type of racial prejudice and strongly disagree that they are prejudiced themselves. McConahay (1982) considers this

form of racism to be very subtle and indirect, and that individuals who do not consider themselves prejudiced can still score highly as a modern racist on his scale. The primary issue for McConahay (1986) is that modern racists do not believe themselves to be racists, they rationalize their beliefs as accurate accounts of the current situation regarding racial relationships and the current status of black citizens in this country.

Scale reactivity. One of the primary reasons for developing the MRS was to reduce the level of reactivity typically found in traditional or "old fashioned" racial attitude instruments. Initial reactivity experiments indicate that the modern racism items are less reactive than traditional old fashioned racism items and that fewer subjects refused to answer them (McConahay, Hardy & Batts, 1981; McConahay, 1986). However, in the most recent study of reactivity, though subjects labeled the modern racism items less racist than the old fashioned items, they did find them significantly more racist than filler (non-racially motivated) items, indicating that they were aware of the racial implications of the scale (McConahay, 1986). Thus, while the reactivity of the modern racism items may have been limited during the time surrounding its initial development, it appears that the items are becoming more transparent over time. This leaves responses to the instrument open to presentation effects, a primary concern in race research, and one that potentially limits its reliability and validity.

The increase in reactivity of the MRS items is not surprising given a comparison of two sample items. One example of an old fashioned item is "black

people are generally not as smart as whites", while a sample modern racism item states "blacks should not push themselves where they are not wanted". It would be difficult to imagine that anyone, except an old fashioned-type racist, would admit strong agreement with this modern racism item. Thus, even the face validity regarding the indirect or subtle nature of the scale appears at risk. In fact, McConahay (1986) himself suggests that new modern racism items will have to be developed as new issues arise in American race relations, and as current measurement items become more reactive. McConahay (1986) would term these new items "ultramodern" racism. However, no new items have been incorporated into the scale and none have been removed.

The increase in the MRS's reactivity lends initial support for the limited use of the instrument as a measure of today's "modern" racist attitudes. Next, the paper turns to a discussion of the empirical validity of the MRS.

Scale validity. Early validation studies of the MRS were conducted in the field, and concerned two politically-based criteria, voting preferences and school busing. Voting preferences for a white versus a black candidate were significantly related to responses on the MRS in two Southern California 1969 mayoral election sites (r's = .39 and .37) (McConahay & Hough, 1976; Kinder & Sears, 1981). Furthermore, a correlation of .34 was discovered in a 1973 mayoral election between the same two candidates (McConahay & Hough, 1976; Kinder & Sears, 1981). Significant correlations between the MRS and the strength of ones opposition towards busing were noted in 1976 and 1977 (r's = .51 and .39,

respectively) (McConahay, 1982). The strength of this particular criteria, however, is limited as McConahay (1986) himself indicates that many experts and white members of the general public fail to view opposition to busing as an indicator of racism, modern, old fashioned, or otherwise.

Since these early validation studies, McConahay's (1983; 1986) own lab-based research has been unable to detect any main effects for the MRS when behavioral criteria are used. In a study of hiring preferences, scores on the modern scale were unrelated to the subjects' likelihood of hiring a black versus a white job candidate. This finding indicates that the modern racism items may have failed to maintain good validity over time and/or may not useful predictors outside of a political criteria.

McConahay (1983) has since incorporated a new theory into that of modern racism to help support the continued validity of his instrument. He now suggests that white ambivalence towards blacks is the responsible dimension of racial prejudice and discrimination, and that the MRS can identify this ambivalence among white subjects. Racial ambivalence is described as a conflict between an individual's negative affect towards blacks and his or her values, cognitions and/or desire to maintain a non-prejudiced view of themselves (Gaertner & Dovidio, 1981; 1986). It is believed that most whites are not universally positive or negative about blacks, but that they are ambivalent about them. The contention is that the dissonance caused by racial ambivalence leads people to react more positively towards racial minorities than expected in some situations, and more negatively in

others. Non-ambivalent, or non-racist, people will behave consistently towards blacks across situations. The behavior of racially ambivalent individuals is dependent upon the context of the situation. In specific, they are said to behave more negatively towards blacks to the extent that the situation provides a reasonable, nondiscriminatory, explanation for their prejudiced behavior (Gaertner & Dovidio, 1981). They will behave more positively when the situation may result in clear attributions of prejudice for negative behaviors. Non-ambivalent people will behave the same regardless of the context of the situation.

One study by McConahay (1993) shows support for the racial ambivalence/modern racism connection. In the same study in which he did not find a significant relationship between MRS scores and a preference for a black or white job candidate, McConahay did find a difference in hiring preference behavior related to ones score on the MRS and the nature of a hiring decision context. The hiring decision context was designed to elicit either positive or negative behavior towards the black job candidate. In the negative context, a stimulus resume with a picture attached to it was rated prior to two additional resumes that contained no pictures. The manipulation was that either a black or a white picture accompanied the stimulus resume. The goal was to create salience for the "black" resume compared to the later two racially ambiguous ones. In the positive condition, the stimulus resume with either a black or a white picture was rated after the two with no pictures attached, thus no racial salience for the stimulus resume. Integral to the

study was the presumption that subjects would assume that the two resumes with no pictures represented white candidates only.

For the 81 white subjects in the study the results are as follows: (1) when the stimulus resume held the white picture, neither decision context nor the MRS showed any relationship with hiring preference; (2) when the stimulus resume had the black picture attached, high scorers on the MRS preferred the black candidate in the positive behavior context, and a presumably white candidate in the negative context; and (3) the ambivalent or high modern racism subjects responded more positively than non-ambivalent or low modern racism subjects to the black resume in the positive condition and more negatively in the negative context. McConahay (1983; 1986) views these findings as a significant indication that the MRS can still identify racist individuals via racial ambivalence theory. However, several important issues regarding racial attitudes are not accounted for in ambivalence theory or in the design and results of this study.

The racial ambivalence/modern racism connection assumes that racist individuals will respond either more positively or more negatively than non-racist individuals given the appropriate situational context. However, it is fair to assume that there is a segment of racist individuals, admittedly or not, who will respond to blacks more negatively than whites, regardless of the situational context. These individuals could be considered "non-ambivalent racists" and are not accounted for in the theory. There are also non-racist people who will respond to blacks more positively than racist individuals, regardless of context, the "non-ambivalent non-

racist." Ambivalence theory and the results of the study also suggest that racist people actually prefer black candidates more so than non-racist people given the appropriate situation and/or the possibility of recrimination. However, it is illogical to label an individual who favors a black job candidate as a racist when his or her actions are clearly not representative of racist behavior.

Finally, in true social interactions, a contrived behavioral context such as the above is usually not present. People behave only according to their racial beliefs and attitudes. Therefore, it is highly limiting to tie the definition of racism to restricted motivational circumstances. Thus, a valid and useable measure of racism must be able to clearly differentiate between racist and non-racist individuals in all types of contexts. Overall, given equal situations, the MRS did not distinguish between the behavior of racist and non-racist individuals, further demonstrating the limits of this instrument.

The proceeding discussion presents the MRS as a non-reactive and valid measure of racist sentiment during the time immediately following its development. More recent work with the instrument indicates that its reactivity is increasing and its validity is declining. These two issues begin to demonstrate the need for a re-analysis of the MRS for use with today's race-based research. They also suggest that new measurement tools must be created that better capture the changes in racial attitudes that have taken place since the inception of modern racism. Furthermore, new research findings concerning the automatic nature of stereotypes and racism

suggest a wholly different approach to assessing racist attitudes. This new research is presented below.

New Research Contraindicating the Usefulness of the Modern Racism Scale

Automaticity of racial attitudes and stereotypes. Several studies have attempted to establish the automatic nature of racial stereotypes and attitudes in social information processing. Gaertner and McLaughlin (1983) presented subjects with word pairs to which they must answer "yes" if both were words and "no" if they were not (i.e., nonsense syllables). They operationalized the strength of the association between the words as the speed with which the respondent answered "yes." These researchers found that white subjects responded significantly faster when the word "white" was paired with a positive term than when the word "black" was paired with the same term (e.g., white – smart vs. black - smart). This difference did not occur with negative word pairings (e.g., white – lazy vs. black – lazy). Moreover, the results were similar for both those who scored high and low on a self-report measure of racial prejudice. In a similar study, Dovidio et al. (1986) presented subjects with a prime word, either "black" or "white," and then asked them to respond as to whether a target trait "could be true" or "was always false" of the prime category. Again, white subjects responded significantly faster when the prime "white" was followed by a positive trait than when the prime "black" was followed by the same trait. In addition, they found that subjects responded faster to negative traits when they were paired with the prime "black." These studies can be

construed as demonstrating automatically activated associations between "white" and positive characteristics, and "black" and negative characteristics.

One reason for the automaticity of attitudes and stereotypes is that they tend to be learned and integrated into social information processing from a very young age (Katz, 1976). Therefore, due to repeated use, this type of information becomes highly accessible during social interactions (Higgins & King, 1981). In addition, when specific stereotypes are used for a long period of time, they are likely to become somewhat routinized in social behavior (Smith, 1990).

Personal control of prejudice. Devine's (1989) model regarding the personal control of negative race-based thoughts describes why some people may respond to racial minorities in a non-prejudiced manner even when negative stereotypes may be automatically activated. Her model indicates that both strong and weak prejudiced individuals are equally knowledgeable of prevailing racial stereotypes, and that within both sets of people these stereotypes are automatically activated in response to a racial minority. However, the model further suggests that those low on racism will consciously override these negative thoughts and replace them with non-prejudiced ones. Thus, an individual may have knowledge of a racial stereotype, and that stereotype may get automatically activated, but if the person holds personal beliefs that disavow it, the stereotype is inhibited and replaced with non-prejudiced beliefs (Devine, 1989). Devine's model suggests that knowledge of stereotypes, their automatic activation, and prejudiced behavior may not necessarily be linked.

Devine's empirical test of her model indicates support for it. Both low and high prejudiced subjects report knowledge of negative racial stereotypes and automatically activated them in response to a target. In addition, those subjects who scored low on prejudice used fewer negative racial stereotypes when asked to generate a list of thoughts pertaining to African Americans.

Devine's (1989) model and research go beyond the theory and findings regarding stereotyping to show that even when stereotypes are automatically activated, non-prejudiced thoughts can prevail. Her findings also suggest that an important determinant of racist behavior may be one's personal beliefs regarding racial minorities. The new theory and research regarding the automatic nature of stereotypes and its possible effects on racist behavior creates both a theoretical and a measurement problem for the MRS. Though modern racism theory does indicate a sort of personal control over attitudes given the ambivalence theory connection, this control is only related to one's perceived level of censure or recrimination for the behavior they exhibit, and not their personal views regarding prejudice. Furthermore, Devine's (1989) model identifies individuals motivated to control their racial stereotypes as non- racist. Alternatively, McConahay's theory suggests that it is racist individuals who are motivated to control their stereotypic responses and that non-racist people have no need or motivation to do so.

Limitations to Devine's (1989) research. While the generalities of Devine's (1989) model are strong, there are several substantial issues that are not addressed in her test of it. First, it is not evident the extent to which subjects repressed their

racial stereotypes due to personally held non-prejudiced beliefs or to social desirability. Some research suggests that societal changes have created a sort of social pressure or a social norm to behave without prejudice, thus creating a general atmosphere that discourages any type of racially prejudiced responses (Monteith, Deneen, & Tooman, 1996). Thus, Devine's (1989) subjects may have responded to her study in a manner that projects a more socially acceptable picture of themselves to others.

Additionally, level of prejudice was assessed in Devine's (1989) study via the MRS, which may be a less than optimal measure of racism. Finally, both the MRS and the thought-generating task were administered at the same time. It is highly possible that the first task "primed" responses to the second, creating a demand characteristic for non-prejudiced responses.

The preceding discussion lays the groundwork for establishing that the MRS may no longer be an adequate measure of racist attitudes. Though changes in race relations and racial attitudes have taken place in this country, the MRS has not been updated to reflect these changes, McConahay's (1986) so called ultra modern racism scale. Furthermore, while the model of racist responding forwarded by Devine (1989) is strong, her research in support of it shows some weaknesses. A better test of the model that delineates between the strength of personal versus social motivations to respond without prejudice must be incorporated. The paper now focuses on the current research.

Current Study

The purpose of the current study is twofold. The primary objective is to test the current validity of the MRS as measure of today's racist attitudes. This research is the first attempt since McConahay's original work to assess the validity of the MRS. Given the temporal difference in McConahay's research and the present study, and the new findings regarding the nature of stereotypes and prejudice, different results are hypothesized. An organizational hiring decision exercise was employed as the criterion in the current study in order to be comparable with McConahay's (1986) most recent work. In the present research, the decision task was embedded in an in-basket exercise, which is a simulation of the ordinary tasks of a manager's job (Thorton & Byham, 1982). Materials contained in the exercise include a wide variety of items that may be found in the in-basket of a restaurant chain executive. The focus of the study is a hiring decision for a new human resources director. Both black and white applicants are included, representing both qualified and unqualified persons for the position. Neither ambivalence theory nor a motivating decision context were included in the current study so that the MRS could be evaluated in a more realistic context, one that might be found within an actual organization. It is expected that the MRS will not be significantly related with racist responses to the in-basket hiring decision exercise. Formally stated:

> Hypothesis one: The MRS will not be a significant predictor of racist responses to the in-basket hiring decision exercise.

The secondary objective of this paper is to demonstrate that non-prejudiced responses may be strongly motivated by attempts to convince both oneself and

others that the one is not racist. In other words, that individuals will respond in a non-racist manner to convince themselves that they are not prejudiced and to managed the impressions others have of them as non-prejudiced. Thus, it is expected that a measure of two different types of social desirability, self-deceptive enhancement and impression management, will be valid predictors of racist responses to the hiring exercise. Self-deceptive enhancement is defined as the tendency to provide inflated descriptions of oneself in order to maintain high regard for oneself (Paulhus, 1994). This measure will be used to assess the extent to which individuals are motivated by internal or personal sources to respond without prejudice. Impression management is defined as the tendency to give inflated descriptions of oneself to an audience (Paulhus, 1994). This scale will be used to measure the extent to which people are motivated by external or social sources to respond without prejudice.

The following two hypotheses are proposed:

> Hypothesis two: Self-deceptive enhancement will be a significant predictor of racist responses to the in-basket hiring decision exercise.
>
> Hypothesis three: Impression management will be a significant predictor of racist responses to the in-basket hiring decision exercise.

Conclusion

How to account for and assess racist behavior has been a research goal for a very long time, and many theories and assessment tools have been developed to do so. Modern racism theory and its accompanying measurement tool have been one of

the most popular. Though the MRS was a valid and useful measure during its time, little current research can establish its continued usefulness. In fact, recent research regarding the automatic nature stereotypes and racism suggests a reassessment of its validity. The current study is designed to do just that. It is expected that the results of the current research will demonstrate the limits of the MRS when used in today's social climate and will suggest that new types of measures that take into account the automatic nature of racial attitudes be developed. This research will further establish the role that social desirability plays in racist responses, an issue that continues to plague racism research.

CHAPTER II
METHOD

Participants

The participants were 182 undergraduate students at a large southeastern university, all enrolled in an introductory business computer course. They were recruited on a voluntary basis and offered extra course credit in exchange for their participation. The group was predominately white (87 percent), had an average age of 21.5 (range 18 to 70), and was equally split along gender.

A power analysis was conducted to determine if the sample size of 182 would allow for adequate power to find significant relationships among the variables used in this study. When an effect size equal to .30 is predicted, the resulting power for this sample size is .98 (alpha = .05, two tailed). Effect sizes of .40 or greater would lead to a predicted level of power that exceeds .995 (alpha - .05, two tailed) (Cohen & Cohen, 1983). Previously reported correlations between the MRS and behavioral criteria range from .34 to .51 (McConahay & Hough, 1976; Kinder & Sears, 1981; McConahay, 1982). Given this, the number of subjects in this study should allow for enough power to adequately test the hypotheses stated in this research and to detect significant relationships between the MRS and the criteria if they truly exist.

Measures

Four different instruments were administered during the study. Each is fully described below.

Balanced Inventory of Desirable Responding (BIDR) (Paulhus, 1994). This instrument measures two separate forms of socially desirable responding, (a) self-deceptive enhancement (SDE) and (b) impression management (IM).

Self-deceptive enhancement is considered an unconscious form of desirable responding. High scorers on this scale are characterized by the tendency to respond in self-serving or self-enhancing manners, attempting to present themselves in an overly positive light. This type of self-serving distortion has been demonstrated on a variety of objective measures. For example, those with high SDE scores tend to report lower than average expectations of being involved in a traffic accident, while they have a higher illusion of control and belief that they very prone to love. High SDE subjects also report a greater confidence in their memory even when the contents of their memory does not reflect accurate knowledge. Furthermore, the SDE items correlate with high extroversion and low neuroticism, based on the Big Five personality traits. This suggests that those high on SDE possess an "energetic, positive orientation to life" (Paulhus, 1994, p. 16). Sample SDE items include "I don't care what other people really think of me" and "The reason I vote is because my vote can make a difference".

Impression management is a conscious form of social desirability, and is defined as the tendency of individuals to over-report their performance on a variety of desirable behaviors, while under-reporting their undesirable behaviors. Since such statements involve actual behaviors, any distortion may be construed as a conscious lie. Scores on the IM scale reveal strong correlations with traditional lie

scales (i.e., Eysenck's Lie Scale, MMPI Lie scale) and have shown to be highly affected by conditions that call for impression management. These items are significantly related to the Big Five measures of agreeableness and conscientiousness, suggesting that high IM scorers have socially conventional and cautious personalities. Examples of IM items include "When I hear people taking privately, I avoid listening" and "I sometimes tell lies if I have to."

The two above scales represent two clear factors when both exploratory and confirmatory factor analyses are used. Furthermore, the factors are not significantly correlated in either analysis. Previously reported coefficient alpha reliabilities for SDE range from .70 to .82, and from .80 to .86 for IM. In the current study, the coefficient alpha reliabilities are .66 and .81 for SDE and IM, respectively. Each of the scales consists of 20 items measured on a five-point Likert-type scale, anchored by "not true" and "very true". High scores indicate greater social desirability on both factors.

Modern Racism Scale (MRS) (McConahay, 1986). This instrument identifies individuals who possess "modern racist" beliefs, defined above. It consists of seven items scored on a five-point Likert-type scale anchored by "strongly disagree" and "strongly agree". High scores indicate stronger modern racist beliefs. The MRS items were embedded in ten filler items and eight modern sexism items (Swim, Aikin, Hall, & Hunter, 1995). The contents of the filler items reflect politically current issues such as the environment and violence on television. The modern sexism items were written to reflect sexist beliefs similar to those of

modern racism. The filler and modern sexism items were included to protect the goal of the MRS items and because most other studies that have used the MRS have administered it in a similar manner. This instrument was titled the "Social Attitudes Survey (SAS)." In prior college samples, coefficient alpha reliabilities for the MRS range from .86 to .91 (McConahay, 1983), while an alpha of .82 was found in the current sample.

In-Basket Exercise (adapted from Brief, Buttram, Elliot, Reizenstein, & McCline, 1995). The criteria for this study are embedded within an in-basket exercise. This exercise consists of a variety of letters and memorandums to which subjects must render and report decisions. The primary criterion consists of a hiring decision. The respondent must evaluate the adequacy eight applicants for the position of vice-president of human resources. They are provided with relevant background and employment information as well as data pertaining to the race, gender, marital status, and hobbies of the eight applicants. The subject is asked to rate the adequacy of each applicant on a seven-point scale anchored by "excellent referral" and "should not have been referred". Low scores indicate a stronger rating of the applicant. The applicant pool is completely balanced and crossed with respect race (African American and white), gender, and qualifications for the position (qualified and unqualified). Qualified applicants were those with relevant work histories and higher education (for example an MBA in addition to a bachelor's degree).

For the analysis, both raw criterion scores and difference score criteria were used. The raw score criteria consists of eight scores representing all applicants as follows: qualified white male, qualified black male, qualified white female, qualified black female, unqualified white male, unqualified black male, unqualified white female, unqualified black female.

The difference score criteria were calculated by subtracting the rating each respondent gave to qualified minority applicants (i.e., African American) from the rating they gave to unqualified majority applicants (i.e., white). This resulted in three scores, unqualified white female minus qualified African American female, unqualified white male minus qualified African American male, unqualified white minus qualified African American (genders combined). High difference scores represent less racist decisions, while low difference scores indicate more racism.

The purpose of using the difference scores in addition to the raw scores was to create a criteria that more clearly represents a racially biased decision. In effect, a difference score that indicates a preference for an unqualified white applicant over a qualified black is a more accurate assessment of racism than merely comparing how the subjects rate each of the applicants individually.

Procedure

The present study proceeded in two separate administrations. This format was used to give the appearance that two different and unrelated studies were being conducted. During the first administration, the subjects completed the SAS and the

BIDR. These instruments were distributed during a regular class meeting and were collected the following day during the laboratory meeting.

The second administration occurred four weeks later and was held outside of class time. During this administration subjects completed the in-basket exercise.

CHAPTER III
RESULTS

Means and standard deviations for the predictors and criteria are provided in Table 1. Results of the construct validity analysis for the in-basket exercise are provided in Table 2, and Table 3 displays the intercorreltations of all variables. All tables can be found in the appendix. Analysis of the stated hypotheses employed a three prong approach, using correlational analyses, multivariate regression, and dominance analysis (Budescu, 1993). The findings of each analysis contribute to a pattern of results that generally support the hypotheses forwarded for this study. Each of the three analyses is discussed in turn with respect to specific hypotheses.

Descriptive Analysis

The mean MRS score is 17.05, with a standard deviation of 4.56. This mean indicates that the subjects scored mostly in the "low-racist" segment of the possible range of MRS scores. Furthermore, scores ranged from a high of 35 to a low of 7. Thus, while the average score indicates lower levels of racism, the entire scope of possible scores on the instrument was used.

The mean score for the IM subscale is 56.95 with a standard deviation of 11.24. On this scale, the average score fell around the midpoint of the possible range of scores. Moreover, the scores ranged from 25 to 87 showing a fairly good span of possible scores being used. The mean for the SDE subscale is 64.35 with a standard deviation of 7.87. This mean, higher than the one for IM, suggests that subjects in this study exhibit higher levels of self-deceptive enhancement than

impression management. Additionally, the range of scores, from a low of 41 to a high of 85, is somewhat more limited than that of IM, and is more clustered at the higher end of the range.

The means, standard deviations and ranges for the raw criterion scores are as follows: for the qualified white male the mean is 1.56 with a standard deviation of .68, for the qualified black male the mean is 1.68 with a standard deviation of .69, for the qualified black female the mean is 2.18 with a standard deviation of .89, for the qualified white female the mean is 2.37 with a standard deviation of .81, for the unqualified black female the mean is 3.47 with a standard .90, for the unqualified white male the mean 3.84 with a standard deviation of 1.13, for the unqualified black male the mean is 4.22 with a standard deviation 1.02, and for the unqualified white female the mean is 4.46 with a standard deviation of 1.01. Scores for the qualified white male, qualified black male, and qualified black female range from one to four. The qualified white female has scores that range from one to five, while the unqualified black female's scores range from one to six. The unqualified white male and the unqualified white female scores' range from one to seven, and the unqualified black male's scores range from two to seven.

With regard to the means for the criterion difference scores, high negative scores would indicate strong racist decisions, while high positive scores would indicate that little to no racism impacted the decision. Each of the means for the difference scores are in the positive direction, 2.15 with a standard deviation of 1.30, 2.28 with a standard deviation of 1.34, and 4.39 with a standard deviation of

2.37 for unqualified white male minus qualified black male, unqualified white female minus qualified black female, and all unqualified white applicants minus all qualified black applicants, respectively. While none of the means for the difference score criteria indicate strong levels of racism, several of the scores are in the low positive range suggesting that the decisions still include a fair amount of racial bias.

In-Basket Construct Validity Analysis

The ability of the in-basket exercise to assess racism (i.e., its construct validity) was evaluated by comparing the raw score means of similarly qualified applicants of different races. The results of the dependent sample t-tests show that while racism seems to have affected the ratings of the male applicants, "reverse" racist decisions were evident among the female applicants. Specifically, when the QBM was compared to the QWM, the white applicant received a significantly better rating, $t = 2.37$, $p = .019$. Similar results occurred when the UBM was compared to the UWM, $t = 5.05$, $p = .000$. However, the situation was reversed for the female applicants. The black females were rated better than the white ones in both cases, $t = -2.94$, $p = .004$ and $t = -12.48$, $p = .000$ for the comparison of the qualified applicants and unqualified applicants, respectively.

Overall, these results indicate that a "pro-white" bias was only evident among the ratings of the male applicants. Among the female applicants, the black women were preferred in both the qualified and unqualified cases. Thus, for the remaining analyses, stronger support for the research hypotheses should be evident for the male applicant ratings.

Correlational Analysis

The pattern of correlations that resulted from this study is generally supportive of the hypotheses stated above. Specifically, the MRS did not significantly correlate with any of the raw score or difference score criteria (see Table 2). Alternatively, the SDE subscale showed modest, though significant correlations with all three difference score criteria, $r = .153$, $p = .038$, $r = .210$, $p = .004$, and $r = .200$, $p = .007$ for the difference of unqualified white female and qualified black female, unqualified white male and qualified black male, and all unqualified white applicants and qualified black applicants, respectively (see Table 2). These correlations indicate that the more a person engages in self-deceptive enhancement, the less racist their responses to the in-basket exercise. With respect to the raw score criteria, the SDE sub-scale only correlated significantly with one, the unqualified white male applicant ($r = .197$, $p = .009$). The IM sub-scale, however, did not result in any significant relationships with either the raw score or the difference score criteria. This outcome was contrary to the stated predictions.

Thus, while the MRS and IM are not significantly related to racist responses to the in-basket exercise, the SDE sub-scale is. These findings support two of the three hypotheses, and begin to demonstrate a pattern of results showing that the MRS may not adequately assess racist behavior in a non-contrived context. The pattern of correlations also indicates the ability of implicit social desirability to predict racist responses, in addition to the superiority of SDE over IM in prediction.

The above results also indicate that the raw score criteria are not effective for examining the stated hypotheses, and that the difference scores better serve the goals of the research. Thus, the remaining analyses will be conducted with the three difference score criteria only. Results from the multivariate regression analysis are presented next.

Multivariate Regression

The next phase of the analysis was pursued using multivariate regression with SDE, IM, and the MRS predicting the three difference score criteria. A similar pattern resulted from this analysis. While the SDE sub-scale showed multivariate significance, $F = 3.042$, $p = .030$, neither the MRS nor the IM sub-scale did (see table 3).

Follow-up univariate tests indicate that the SDE sub-scale was a significant predictor of the unqualified white male and qualified black male difference score, $F = 8.16$, $p = .005$, as well as the difference between all white applicants and all black applicants, $F = 6.03$, $p = .015$ (see table 4). The SDE sub-scale, was not, however, significantly related to the unqualified white female and qualified black female difference score in this analysis.

The results of the multivariate regression provide an additional layer of support for the hypotheses. Again, the SDE sub-scale was significantly related to racist responses to the in-basket exercise, while the MRS and IM scale were not. Similarly, this outcome supports two of the three hypotheses, and further supports

the primary goals of the research. Next, the results of the dominance analysis are discussed.

Dominance Analysis

A series of dominance analyses were conducted to determine the relative importance of the three predictors, in relationship to each other, for predicting the three difference score criteria. For the unqualified white male and qualified black male difference score, a total of 4.8% of the variance was accounted for by the three predictors ($R^2 = .048$). SDE was the most important predictor, while IM and MRS were found to share the second position of importance (see Table 5).

With respect to proportional contribution to R^2, SDE accounted for 93.21% of the variance. Impression management and the MRS contributed an additional 3.33% and 3.47%, respectively (see Table 5). SDE was found to be the most valuable predictor of racist responses. Of the 4.8% of the variance that is jointly explained by the three predictors, SDE contributed the overwhelming portion of variance. Impression management and MRS each contributed a very small, but equivalent amounts.

For the unqualified white female and qualified black female difference score, a total of 3.6% of the variance was accounted for by the three predictors ($R^2 = .036$). Self-deceptive enhancement was found to be the most important predictor, while IM was the second most important, and MRS the third (see Table 6).

With respect to proportional contribution to R^2, SDE made up 58.66% of the variance. Impression management and the MRS contributed 28.36% and 12.98%,

respectively (see Table 6). Thus, SDE was found to be the most valuable predictor of racist responses. Of the 3.6% of the variance that is jointly explained by the three predictors, SDE contributed more than half, while IM contributed an additional third, and the MRS about 13 percent.

For the difference score between all unqualified white applicants and all qualified black applicants, a total of 4.6% of the variance was accounted for by the three predictors ($R^2 = .046$). Once again, SDE was found to be the most important predictor, while IM and the MRS shared second place (see Table 7).

With respect to proportional contribution to R^2, SDE accounted for 79.40% of the variance. Impression management and the MRS contributed 12.69% and 7.91%, respectively. Again, SDE was found to be the most important predictor of racist responses. Of the 4.6% of the variance that is jointly explained by the three predictors, SDE contributed more than three-quarters, while the MRS and IM each contributed just over and just under ten percent, respectively (see table 7).

Taken together, the results of the dominance analyses furnish a final level of support for the study. For all three criteria, SDE is the most valuable predictor. In each case it clearly dominated the other two predictors, contributing the majority of variance. Impression management, however, only dominated the MRS in one circumstance, providing an almost equal amount of variance in the other two.

The results of the dominance analysis, however, must be constructed in terms of the very small amounts of variance in racist responses that is being accounted for by the three predictors in the first place. Since less than five percent

of the variance is accounted for in each criteria, it is clear that stronger measures of racist attitudes are needed to appropriately assess this important construct.

Summary of Results

In total, the above analyses support all but one of the stated hypotheses, when the difference score criteria are used. Hypothesis one, that the MRS would not be a significant predictor of racist responses to the in-basket hiring decision exercise was supported on all levels. It did not significantly correlate with any of the three criteria and did not reach multivariate significance in the regression analysis. Moreover, the results of the dominance analysis show the scale to be a weak contributor to the prediction of racist responses.

Hypothesis two, that the SDE sub-scale would be a significant predictor of racist responses, was also fully supported by all layers of the analyses. It significantly correlated with all criteria, had a significant multivariate effect in the regression analysis, and significant univariate effects with two of the criteria. The dominance analysis also showed the SDE to be the most important predictor of racist responses, contributing the vast majority of the variance in all three criteria conditions. It must be noted, however, that the correlations between SDE and the criteria were in the low to moderate range. This indicates that while a relationship does exist, much stronger predictors are needed to adequately assess racist behavior. This is also evident in the modest R^2's found in the regression and dominance analysis.

Finally, the only hypothesis not supported by the results was number three, that IM would be a significant predictor of racist responses to the in-basket exercise. While this outcome is contrary to prediction, it makes some sense given a comparison of the definitions of SDE and IM. Impression management is defined as giving inflated self-descriptions to an audience. Thus, it appears that respondents felt no compelling motivation to appear outwardly non-racist while responding to the in-basket exercise. This may be due to the fact that the racial implications of the exercise were very discrete, and that respondents were assured confidentiality of their responses.

CHAPTER IV
DISCUSSION

The primary goal of the present research was to demonstrate a limited ability of the MRS to predict current racist attitudes. This outcome was realized. The MRS did not reach significance in any of the analyses, and was shown to bring a minute amount of variance to the prediction of racist responses when dominance analysis was used. While previous work with the MRS has demonstrated its validity, the current results contradict those findings. It may be that in the time period between the original validation studies and the present, enough change in racial attitudes has occurred to render some of the MRS items invalid. The items may now be more characteristic of so called "old fashioned" racist attitudes and are less likely to identify today's "modern" racist sentiment. Additionally, the items may now be reactive enough to lead respondents to censure their responses in a non-racist direction. However, additional research is needed to answer this question, as the MRS was not related to social desirability in this study.

There are several issues may account this finding. First, it may be that the subjects truly felt no implicit or explicit motivation to censure their responses to the MRS, such that their responses are free from detectable levels of social desirability. This may be because many of the MRS items represent fairly strong racist sentiment and many of the subjects truly disagreed with the statements. Further, the study did not include any African American administrators, a characteristic that often leads subjects to slant their responses to race-based surveys in a non-racist fashion, thus

resulting a higher level of desirable responding. Finally, it may be that desirable responding evident in the MRS was not assessable by the BIRD, and that a different measure of social desirability may be better able to capture it. Overall, however, it appears that the MRS is free from the effects of desirable responding, as measured in this research. However, since the instrument is also free of relationships with the behavioral criteria presented in this study, it may not remain a useful assessment of today's racist attitudes. Freedom from desirable responding is only one the characteristics important for a successful racial attitude scale.

Many race researchers continue to use the MRS without regard to its current validity. The results of this study indicate that more attention should be paid to this issue and suggest that additional analyses regarding the validity of the MRS are needed before its continued use can be supported. New MRS items that reflect the current status of American race relations and the racial attitudes of whites may need be written in order to maintain validity of the MRS. While McConahay (1986) admits that updates are needed for the instrument, his so called the "ultra modern racism scale" has not yet come to fruition. Taken together, the results of this study suggest that race researchers should consider discontinuing to use the current MRS and focus on developing instruments that better capture the today's "modern" racial attitudes. Furthermore, instruments that incorporate new theory and research concerning the automatic and unconscious nature of racial attitudes and stereotypes should be developed. This is a growing area of investigation and will be more fully discussed below.

The secondary goal of this research was also realized. The results of this study indicate a significant, though modest, relationship between implicit social desirability and racist responses. The SDE sub-scale of the BDIR was significant in all layers of the analyses, and was shown to be the strongest predictor in all dominance analyses. The measure of explicit social desirability, however, was not an effective predictor. The IM sub-scale of the BDIR was not significant in any of the analyses, and contributed only minor amounts of variance to prediction, as revealed by the dominance analyses. Thus, while a person's internal or implicit motivation to be seen as non-racist is related to racist responses, external or social motivation to appear so is not.

With respect to Devine's (1989) theory and research regarding the personal control of racial attitudes, the above results indicate that implicit social desirability is playing somewhat of a role in relationship to racist responses. However, given the small effects of the SDE sub-scale, it is still possible that a significant amount of personal control occurs in the inhibition of racist stereotypes and responses, thus supporting Devine's theory. Future research should measure both implicit social desirability and personal control so that they can be disentangled, and the specific contributions of each may be determined.

One finding that was unexpected in this research was the significant preference found for the black female applicants over the white ones when these applicants were rated. Several explanations may exist for this finding. One explanation is that the in-basket exercise was not designed to adequately assess

racist decisions to begin with. The exercise may have been too subtle such that the race of the applicants was not identified by the subjects and thus could not impact ratings. It is also possible that the descriptions of the applicants' qualifications were not equivalent. The respondents may have evaluated the black women, both qualified and unqualified, as truly more qualified for the job than the white women. Finally, it could be reasoned that the students who participated in this study were not at all racist, whether implicitly or explicitly. Therefore, no matter how the exercise was constructed or the applicants described, racist ratings would not be the result.

There are, however, also several issues to suggest that the above explanations are not the most plausible. First, and most importantly, is that when the male applicants were rated, the white men were significantly preferred to the black men. Thus, the exercise seems to have been adequately constructed and has the ability to assess racist decisions. It is not likely that the subjects were able to detect the race of the male applicants, but not the female ones. Furthermore, the qualification descriptions of the applicants were previously pilot tested and results showed no differences between the applicants within each of the qualification conditions (i.e., qualified and unqualified) (Brief, Buttram, Elliot, Reizenstein, & McCline, 1995).

Finally, it does not appear that the pool of subjects was free from racism as they did rate the similarly qualified white males significantly better than the black ones. A more plausible explanation for the above finding is that negative race-based

stereotypes in general are stronger and better formed for black men than they are for black women. For example, negative media representations of African Americans tend to focus on men, lending to the belief that problems that may be traced back to race are associated more with men than with women (Feagin, Vera, & Batur, 2001). In addition, white individuals report feeling more comfortable around black women than black men when told they must interact with one or the other (Feagin, Vera, & Batur, 2001).

Some practical evidence also indicates that race-based stereotypes particularly favor women in the workplace. In a review of salary differences, Hacker (2003) finds that while black employees of both genders often earn less than their white counterparts, salaries of black men lag much farther behind than those of black women. For example, black male lawyers between the ages of thirty-five and thirty-nine averaged $744 for every $1,000 made by their white male colleagues. However, black women lawyers in the same age group make $926 for every $1,000 made by a white female lawyer of the same age. There are also circumstances in which black women reportedly earn slightly more that similarly educated white women. Black women with bachelor's degrees earn $1,117 and those with master's degrees earn $1, 030 for each $1,000 earned by a similarly situated white women (Hacker, 2003). Additionally, Hacker (2003) reports that when organizations are interested in hiring more black employees, they prefer to hire women, as they are viewed as less assertive and more accommodating. Overall, Hacker (2003) suggests

that black women are viewed as more employable and as better employees than black men.

It seems likely that the forces that cause the male/female differences for African Americans in employment settings are the same ones that lead the subjects in this study to evaluate the black female applicants better than the black males in relation to their white counterparts.

Why the black females were rated significantly better than the white females is different issue altogether, and one with a less practical explanation. It is possible that when subjects rated the black female applicants, they engaged in a type of "overcompensation." They may have felt that given the limits often afforded African Americans and women in the workplace, a black woman to have achieved such occupational standing was exceptional and deserved a better rating. Whatever the case, this is an issue that warrants additional attention. Future race research is needed to dissect the attitudes, stereotypes, and biases related to black men and black women. It is necessary to attempt to establish if different stereotypes lead to different outcomes for these two groups of people.

Taken together, the results of this study suggest that an entirely new method of assessing race-related attitudes may be necessary. Specifically, the significant relationship between the SDE and racist responses, and the lack of a relationship with the other two suggests that implicit measurement may be a promising avenue to take in this regard. In fact, there have been repeated calls for the development and use of indirect and implicit measures (Campbell, 1950; Dovidio & Fazio, 1992;

Gaertner, 1976; Greenwald & Banaji, 1995; Webb, Campbell, Schwartz, & Sechrest, 1966) and warnings against using overt or self-report formats (Nisbett & Wilson, 1977), especially when socially sensitive attitudes, such as racism, are measured. Therefore, this line of research would greatly benefit by an instrument administered in an indirect format, and that is specifically targeted at implicit racist attitudes. A scale of this sort would have two significant benefits for race research. It would be able to assess negative racist attitudes without the knowledge of the respondent, thus distinguishing itself as a truly non-reactive instrument. It would also be able to tap unconscious or implicit racist beliefs, beliefs that are unknowingly activated in response to a target individual. This type of measurement is discussed in the next section of the paper.

Measuring Implicit Racial Attitudes

The unconscious and implicit nature of social attitudes is supported by an emerging stream of theory and research (Banaji & Greenwald, 1994; Banaji, Hardin, & Rothman, 1993; Devine, 1989; Devine, Montheith, Zuwerink, & Elliot, 1991; Dovidio, Evans, & Tyler, 1986; Fiske, 1989; Geis, 1993, Gilbert & Hixon, 1991; Greenwald & Banaji 1995, Hamilton & Sherman, 1994; Perdue & Gurtman, 1990). This research shows that attitudes can be automatically and unconsciously activated when interacting with members of a target group. Greenwald and Banaji (1995) define implicit attitudes as "introspectively unidentified (or inaccurately identified) traces of past experiences that mediate favorable or unfavorable feeling, thought, or action toward social objects" (p. 8). These "traces of past experiences"

are activated without the individual's knowledge and may unknowingly influence interactions with members of the associated group (Greenwald & Banaji, 1995). Racially prejudiced behavior may be the unintended result.

When the goal is to assess implicit attitudes, indirect measures are not only psychometrically helpful, but theoretically essential (Greenwald & Banaji, 1995). A number of studies have employed an indirect process to measure racial attitudes, and have successfully established their automatic and implicit nature (Devine, 1989; Dovidio et al., 1986; Howitt & Owusu-Bempah, 1990; Gaertner & McLaughlin 1983; Word, Zanna, & Cooper, 1974). However, the measurement techniques used is these studies do not allow for efficient broad-based use (Greenwald & Banaji, 1995). Nor are their experimental paradigms appropriate for applied uses, such as individual or organizational assessments. There are, however, two different measurement techniques that address the need for indirect measurement of racial attitudes while providing formats that are more easily administered to large groups of people. The Implicit Association Test (Greenwald, McGee, & Schwartz, 1998) and Conditional Reasoning (James, 1998) each provide a method for measuring implicit racial attitudes and will be discussed separately below.

Overview of the implicit association test. Greenwald et al, (1998) designed the implicit association test (IAT) to measure a range of implicit attitudes, of which racism is one. This is accomplished by examining the automatic associations people make between various attitude objects (e.g., a picture of a black or white person) and an evaluative attribute (e.g., a pleasant or an unpleasant word). The IAT

measures how closely an attitude object and an evaluative attribute are associated via cognitive priming exercises similar to those used in other research (Dovidio et al., 1986; Gaertner & McLaughlin, 1983). The closer the association, the stronger the implicit attitude for or against the object is assessed to be. For example, if an individual has a stronger association for white pictures and pleasant words than they do for the black ones, a conclusion of implicit racial prejudice is made.

Greenwald et al's (1998) research indicates that white subjects have an implicit preference for white pictures and against black ones. This even occurred for subjects who explicitly disavowed racial prejudice on overt instruments (of which the MRS was one).

The IAT has received a great deal of attention in both the academic and popular press. However some research exists that raises questions about the actual construct measured by the IAT (Cameron, Alverez, & Bargh, 2000; Karpinski & Hilton, 2001). Karpinski and Hilton's (2001) research suggests that the IAT may be a measure of concept familiarization and not one of implicit bias. Their results indicate that the IAT may measure "environmental associations" and not implicit ones (Karpinski & Hilton, 2001).

While the IAT is an interesting and innovative tool, its potential for assessing implicit racial attitudes specifically has yet to be determined. Research suggests that it may tap a construct different from those measured by other implicit techniques. The conditional reasoning assessment, however, indirectly assesses

implicit attitudes via problem solving items and not via priming exercises, eliminating the concern of measuring environmental versus implicit associations.

Overview of conditional reasoning. With the conditional reasoning (CR) technology respondents are asked to solve reasoning problems that appear to be assessing critical thinking skills. However, the answers respondents furnish actually provide insight into the individual's underlying cognitive or implicit biases and not their critical thinking skills. This is accomplished because people tend to subscribe to reasoning that supports or justifies their biases and the behavior that typically accompanies them.

James (1998) refers to these biases as "justification mechanisms". Conditional reasoning problems are written such that justification mechanisms (JMs) that reflect a particular bias are implicitly embedded within the answers provided. Respondents will find logical and select only those answers that are indicative of their biases. (For a complete review of Conditional Reasoning see James, 1998).

The conditional reasoning measure for racial bias. The justification mechanisms for racial bias provide racist individuals a false sense reasonableness for their prejudiced thoughts and behavior. One of the primary justification mechanisms for the CR measure for racial bias, stereotype bias, is presented below.

Stereotype bias is the propensity to use stereotypic or categorical information, at the expense of relevant individuating information, in social situations. Thus, individuals may be viewed as components of a category rather than

as unique people. Two social cognitive biases form the crux of this JM, the outgroup homogeneity effect and the assimilation effect. The outgroup homogeneity effect is the perception that members of the outgroup are more homogeneous than members of the ingroup (Judd & Park, 1988; Linville, Fischer, & Salovery, 1990; Linville & Jones, 1980; Linville, Salovey, & Fischer, 1986; Park & Rothbart, 1982; Quattrone & Jones, 1980; Wilder, 1984). Therefore, while people see a variety of individual differences among members of the group to which they belong, they view members of other groups as highly similar to each other. When this occurs, the likelihood that members of other groups will be perceived as individuals and responded to as such decreases. The outgroup homogeneity effect is a ubiquitous finding in the literature and has been found to occur regardless of the type of group. However, the effect is stronger and more reliable for naturally occurring groups than for artificially created laboratory groups (Mullen & Hu, 1989).

Assimilation effects occur when an individual is perceived to be more similar to their stereotype than they actually are (Hilton & von Hippel, 1996). Upon encountering a member of a target group, an individual is inclined to attach stereotypic characteristics to that person, even if all indications point otherwise. When members of the same group are perceived as highly similar, interactions with this group are more predictable. Assimilation effects have been found to occur when the interaction will take place both on an individual and a group basis (Nisbett, Krantz, Jepson, & Kunda, 1983; Quattrone & Jones, 1980).

Stereotype bias manifests in a variety of ways during social interactions. For example, people tend to slant their perceptions of behavior in a stereotype consistent manner. The same behavior may be seen as aggressive or threatening if performed by a black individual, but significantly less so if the actor is white (Duncan, 1976; von Hippel, Sekaquaptewa, & Vargas, 1995; Sagar & Schofield, 1980).

Overall, CR provides an assessment technology that is uniquely suited to measuring implicit racial attitudes. By assessing the underlying cognitive structures, via JMs, that are responsible for racist attitudes, this technique has the ability to directly focus on theie unconscious in addition to their conscious nature. Moreover, CR can target the specific reasoning processes that are responsible for an individual's biased behavior by identifying the particular JMs with which he or she most often agrees.

Limitations to the Current Study

The current study is limited by several factors. First, is that the study was conducted in the laboratory. Respondents knew that they would not have to actually interact with the job candidates, nor did they actually see them. Thus, while the race of each candidate was indicated on the application information, it would have been more salient had the respondents actually been face-to-face with them. In addition, the respondents knew that they were completing a hypothetical in-basket exercise and that the applicant information was fictitious. However, in-basket exercises are

widely used for organizational assessments and found to be highly useful in such cases.

This study is also limited by its subject pool. All subjects were college students, a group that is traditionally less racist than the population at large. In addition, this age group tends to have limited working experiences and are not typically involved in reviewing resumes and selecting high level individuals to interview. Thus, they may have been less adept at identifying qualified versus unqualified employment candidates.

Conclusions

Several interesting and important conclusions can be garnered from this study. First is the importance of finding an appropriate tool with which to assess implicit racial attitudes. The results of this and other research lead to the conclusion that the MRS may no longer be an adequate tool with which to assess racist attitudes. Once a fairly nonreactive instrument, it now shows reactivity. Additionally, the MRS may no longer valid under typical behavioral circumstances. While the IAT may be promising, much more research must be conducted to determine its true construct definition and its ability to predict subsequent behavior. The CR measure for racial bias shows all the makings of a truly non-reactive and indirect method to address implicit attitudes. It is expected that validation studies will support its validity, and that this instrument will emerge as an optimum tool with which to assess implicit racial attitudes.

For many years researchers have attempted to measure racial attitudes in a manner that results in accurate and honest responses. The sensitive nature of these beliefs and society's disapproval of negative racist attitudes leads to difficulties when asking people to disclose their true beliefs. Moreover, some evidence suggests that individuals may be unaware of the racist attitudes they may have. Thus, it is increasingly evident that implicit measurement instruments are necessary to accurately assess this type of attitude. With such a tool we will be able accurately measure racist, as well as other types of socially sensitive attitudes, eliminate the concern for social desirability effects, and further our understanding of this important construct many fold.

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Appendix

Table 1

Descriptive Statistics for all Variables

Variable	M	SD	Minimum	Maximum
QWM	1.56	.68	1	4
QBM	1.68	.69	1	4
QBF	2.18	.89	1	4
QWF	2.37	.81	1	5
UBF	3.47	.90	1	6
UWM	3.84	1.13	1	7
UBM	4.22	1.02	2	7
UWF	4.46	1.01	1	7
UWM-QBM	2.15	1.30	-1	6
UWF-QBF	2.28	1.34	-2	6
UW-QB	4.39	2.37	-4	12
MRS	17.05	4.56	7	35
IM	56.95	11.24	25	87
SDE	64.35	7.87	41	85

Note: QWM = qualified white male; UWM = unqualified white male; QBM = qualified black male; UBM = unqualified black male; QWF = qualified white female; UWF = unqualified white female; QBF = qualified black female; UBF = unqualified black female; UW = unqualified white; QB = qualified black; MRS = Modern Racism scale; IM = Impression Management scale; SDE = Self-deceptive enhancement scale

Table 2

Dependent Sample t-test Results for In-Basket Exercise

Raw Score Pair	t	P
QBM and QWM	2.37	.019
UBQ and UWM	5.05	.000
QBF and QWF	-2.94	.004
UBF and UWF	-12.48	.000

Table 3

Intercorrelations Between all Variables

Variable	QBM	QBF	UBM	UBF	QWM	QWF	UWM
QBM	1.00						
QBF	**.388**	1.00					
UBM	-.027	-.056	1.00				
UBF	.1716	.146	**.434**	1.00			
QWM	**.508**	**.387**	.055	**.276**	1.00		
QWF	**.272**	**.443**	.124	.1697	**.319**	1.00	
UWM	.0854	.012	**.524**	**.393**	.120	.179	1.00
UWF	-.0212	.005	**.629**	**.362**	.033	.177	**.530**
UWM-QBM	**-.447**	*-.218*	**.493**	*.243*	-.148	.040	**.836**
UWF-QBF	**-.278**	**-.663**	**.501**	.174	*-.233*	-.163	**.384**
UW-QB	**-.393**	**-.513**	**.585**	*.224*	*-.199*	-.041	**.676**
MRS	.132	.150	-.014	.048	-.037	.097	.044
IM	-.0546	-.111	.004	-.078	-.054	-.145	.013
SDE	-.078	-.071	.033	-.038	-.113	-.056	*.197*

Note: $p < .05$. *$p < .01$.* **$p < .001$.**

Table 3

continued

Variable	UWF	UWM-QBM	UWF-QBF	UW-QB	MRS	IM	SDE
QBM					.82	.81	.66
QBF							
UBM							
UBF							
QWM							
QWF							
UWM							
UWF	1.00						
UWM-QBM	**.438**	1.00					
UWF-QBF	**.746**	**.473**	1.00				
UW-QB	**.629**	**.863**	**.813**	1.00			
MRS	.050	-.033	-.063	-.054	1.00		
IM	.058	.055	.118	.099	-.023	1.00	
SDE	.142	*.210*	.153	*.197*	.069	**.297**	1.00

Note: $p < .05$. *p < .01*. **p < .001**. Coefficient alpha reliabilities are boxed.

Table 4

Results of Multivariate Regression for SDE, IM, and MRS Predicting In-basket Responses

Effect	Value	F	Hypothesis df	Error df
SDE	.951	3.042*	3.00	176
IM	.988	.687	3.0	176
MRS	.944	.344	3.0	176

Note: * P < .05

Table 5

Results of Univariate Follow-up Tests

Predictor	Criterion	Sum of Squares	df	Mean Square	F
SDE	UWF-QBF	5.160	1	5.160	2.917
	UWM - QBM	13.631	1	13.631	8.159*
	UW - QB	33.199	1	33.199	6.030*
IM	UWF-QBF	2.362	1	2.352	1.335
	UWM - QBM	1.363E-02	1	1.363E-02	.008
	UW - QB	2.361	1	2.361	.429
MRS	UWF-QBF	1.802	1	1.802	1.018
	UWM - QBM	.618	1	.618	.370
	UW - QB	4.539	1	4.539	.824

Note: * $p < .05$. R^2 UWM – QBM = .048, R^2 UWF – QBF = .036, R^2 UW – QB = .046

Table 6

Results of Dominance Analysis for all Variables Predicting UWM-QBM

	Beta	Importance	Relative Importance	Relative Rank
SDE	.2159	.0432	93.21%	1
IM	-.0102	.0015	3.33%	2*
MRS	-.0466	.0016	3.47%	2*

Note: * Tie in ranking

Table 7

Results of Dominance Analysis for all Variables Predicting UWF - QBF

	Beta	Importance	Relative Importance	Relative Rank
SDE	.1346	.0199	58.66%	1
IM	.0764	.0096	28.36%	2
MRS	-.0696	.0044	12.98%	3

Table 8

Results of Dominance Analysis for all Variables Predicting UW-QB

	Beta	Importance	Relative Importance	Relative Rank
SDE	.1887	.0356	79.40%	1
IM	.0415	.0057	12.69	2*
MRS	-.0647	.0035	7.91%	2*

Note: * Tie in ranking

Vita

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